DOCUMENT RESUME

ED 369 120 CS 508 558

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TITLE Evaluation of Communication Training Effectiveness in the Workplace: A Case Study.
PUB DATE Feb 94
NOTE 24p.; Paper presented at the Annual Meeting of the Western States Communication Association (San Jose, CA, February 23-27, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Case Studies; Communication Research; *Communication Skills; *Evaluation Methods; Higher Education; Organizational Communication; *Professional Training; Program Effectiveness; School Business Relationship; *Staff Development; Work Environment
IDENTIFIERS Communication Context

ABSTRACT

Although organizations spend increasingly large amounts of money on training, little effort or money is spent on evaluating the effectiveness of training programs. When evaluations are done, they are often designed for specific programs and often consider only participant reactions and immediate learning, and ignore behavior changes and long-term results. A study used personal interviews to evaluate the effectiveness of an oral communication skills training program developed in partnership with a local university and implemented at a large medical organization in a medium-sized southwestern city. Results indicated that the 23 participants reported using the skills in the workplace and also reported perceiving positive results from using the skills. Participants also voluntarily reported success in using the skills outside of the workplace, and supplied voluntary comments about how the training could be improved, providing a rich source of unanticipated data concerning the training program. (Contains 30 references and two tables of data.) (RS)

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Evaluation of Communication Training Effectiveness in the Workplace: A Case Study

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Paper presented to the Organizational Communication Division of the Western States Communication Association Annual Conference San Jose, California February 24-27, 1994

CS508558

RUNNING HEAD: COMM TRAINING EVALUATION

Evaluation of Communication Training Effectiveness in the Workplace: A Case Study

Abstract

Although organizations spend increasingly large amounts of money on training, there is little effort or money spent on evaluating the effectiveness of training programs. When evaluations are done, they are often designed for specific programs and often consider only participant reactions and immediate learning, and ignore behavior changes and long-term results. This study used personal interviews to evaluate the effectiveness of an oral communication skills training program and found that participants reported using the skills in the workplace and also reported perceiving positive results from using the skills. Participants also voluntarily reported success in using the skills outside of the workplace, and supplied voluntary comments about how the training could be improved, providing a rich source of unanticipated data concerning the training program.

Evaluation of Communication Training Effectiveness in the Workplace:
A Case Study

Introduction

By any standard, training in organizations is big business today. Estimates of the amount of money spent by organizations on training as far back as 1985 ranged from $40 billion per year (DeWine, 1987) to $215 billion (Johnson & Kusmierek, 1987a). In addition, estimates are that businesses train as many people as the total enrollment in all of America's four-year colleges and universities (DeWine, 1987). Despite this enormous investment of both human and fiscal resources, there is little evidence that organizations have any formal programs for evaluating their return on investment (ROI) for any of these training programs. This is as much a problem for organizational communication scholars as for businesses, DeWine (1987) claims, because "For scholarship in organizational communication to continue to provide meaningful insights into communication behaviors of organizational members, it must provide the means for organizations to measure the impact of training on the organization" (p. 123). She continues, "Training evaluation is critical to the successful application of organizational communication theory and principles. Currently organizations are evaluating the reactions of participants but doing little to assess the impact of communication training on other levels of Kirkpatrick's hierarchy" (DeWine, 1987, p. 121). Kirkpatrick's four levels of evaluation are defined as: (1) reaction, or participants' immediate reaction to training and trainer; (2) learning, or whether participants gained the intended knowledge or skills in the training environment; (3) behavior, or whether the learning transferred to the work environment and persisted; and (4) results, or what benefits accrued to the organization as a result of the training. These levels are discussed in detail by Goldhaber (1990) and Goldstein (1993), who agree that evaluation is a key part of any training program, and Goldhaber endorses "Kirkpatrick's system as feasible for assessing the impact of communication training programs" (p. 407). Given this agreement on the need for evaluation, we must look to the reasons for its absence as an integral part of organizational training programs.

Goldstein (1993) defines evaluation as "the systematic collection of descriptive and judgmental information necessary to make effective training decisions related to the selection, adoption, value, and modification of various instructional activities" (p. 147). This definition fits nicely with the criticism above in that it specifies the reasons that organizations and organizational communication scholars need to take an interest in evaluation. Without specific criteria for evaluation, neither organizations nor communication scholars have any basis for selecting, adopting, valuing or modifying various training programs. In discussing the criteria for evaluation, Goldstein (1993) notes that there are both process measures, defined as "measures that examine what happens during instruction" (p. 170), and outcome measures, which are simply measures of observable results. He claims that a reliance on outcome measures alone can yield invalid evaluation of the effectiveness of a training program because of possible intervening variables. Thus he advocates an approach which combines the use of process and outcome measures. But just as he advocates a set of information to be collected, he defines the problem facing those who would develop methods for evaluation.

One of the biggest problems in evaluating organizational training is in deciding what information to collect and how to use it to evaluate training effectiveness. It is relatively easy to assess whether the training was enjoyable through the use of a simple survey conducted at the end of class (Kirkpatrick's level one, reaction), and this is often the only evaluation conducted for many training programs. It is also a fairly straightforward process to ascertain whether or not participants learned what they were supposed to learn through the use of observation or pre- and post-test instruments administered at the end of the training (level two, learning), and this is done often, although less frequently than reaction evaluation. The difficulties appear when we try to assess either training transfer or behavior changes (level three, behavior) or the long-term benefits of training (level four, results), both to the employees and to the organization. One of the main reasons for these difficulties is that the effects of training must be assessed or evaluated in an environment which has numerous other forces which affect employees and their interactions with

others. It is difficult to determine which observed effects are due to the training and which are due to other forces.

While there are some ways to minimize the effects of these intervening or moderating variables on an evaluation, many trainers are not willing to invest the necessary time. This is unfortunate, since effective evaluations are key to revising and modifying training courses to ensure that they achieve the desired results. In addition, agreement is necessary on methods and instruments to allow comparability among programs. A review of the literature will provide an overview of what has been done and what remains to be done.

Literature Review

The literature abounds with reports of poor or non-existent evaluation programs (Corder, 1988; Johnson & Kusmierek, 1987a and 1987b; Mattox & Smith, 1983), calls for more evaluation (Goldhaber, 1990; Goldstein, 1993), pleas for standardization of evaluation methods (DeWine, 1987; Stevens & Hellweg, 1990), and reports of ineffective training programs (Baum & James, 1984; Elmes & Costello, 1992). Meanwhile, reports of successful training programs focus more on method of training and evaluation of specific programs (Anderson & Sharpe, 1991; Burnett & Thompson, 1986; Dickson, 1989; Evans, Stanley, Mestrovic, & Rose, 1991; Gray, Buerkel-Rothfuss, & Yerby, 1986; Hudson, Doyle, & Venezia, 1991; Kurtz, 1982; Morrow & Hargie, 1986; Papa & Graham, 1991; Rybczyk, 1987; Sellick, 1991) and less on general effectiveness, despite the widespread belief in the benefit of such programs (Bell & Kerr, 1987; Armstrong, et al., 1986), and evaluators have not settled on one of the standardized instruments for evaluation.

Reasons for Lack of Evaluation

Among the reasons cited for lack of evaluation, management attitudes account for a significant portion. Management is often unwilling to spend the money necessary for effective evaluation (Goldstein, 1993). Lack of understanding of the importance of evaluation contributes to this unwillingness, and is cited by Bell and Kerr (1987) and by Goldstein (1993), while Bell and

Kerr also report that management believes that training programs which are selected and administered must be effective and therefore sees no need for evaluation. This inherent belief is similar to the attitude found by Armstrong, et al., (1986), who surveyed nurses, dentists, and doctors and found that most considered communication training necessary and valuable at several educational levels.

In addition, Corder (1988) and Johnson and Kusmierek (1987a, 1987b) found that training directors and Human Resource (HR) consultants and managers believed in evaluation and did perform some form of evaluation, but did not evaluate training programs in sufficient detail to assess results or behavioral changes. Corder (1988) reported that there were no baseline measurements established to allow for assessment of changes due to programs. Finally, Stevens and Hellweg (1990) believe that the variety of instruments and guidelines contributes to the lack of ability to compare programs in meaningful ways.

Recommendations for Evaluation

Recognizing the problems caused by lack of training program evaluation, several researchers have proposed methods to address the issue. Stevens and Hellweg (1990) call for standards of evaluation which allow for comparison of results across methodologies and training formats, and they also call for investigation of the appropriate time frame for evaluating results. They acknowledge DeWine's (1987) Training Impact Questionnaire (TIQ) as a useful contribution to assessing reaction and behavior, levels one and three of Kirkpatrick's hierarchy (Goldhaber, 1990; Goldstein, 1993), and call for additional validation of this instrument. DeWine (1987) presents the TIQ as a validated instrument for assessing reaction and behavior change concerning a single skill through self-report data.

Goldhaber (1990) presents a candidate method of evaluation which addresses all four levels of Kirkpatrick's hierarchy and offers an example of its use. Similarly, Bell and Kerr (1987) suggest methods for evaluating each of four levels which resemble Kirkpatrick's levels, and they also present a practical example of their use. The International Communication Association has

developed the Communication Audit (Goldhaber & Rogers, 1979) which can be used to assess various elements of communication in organizations, and changes in communication elements can be effective indicators of changes which may be due to training. McLean (1988) argues for the use of surveys to assess communication climate (Falcione, Sussman, & Herden, 1987) and presents a proposed format and a series of questions which could be used to construct a customized climate survey. He argues that a customized survey will be better able to address organizational goals than a general survey.

Finally, several researchers note limitations and pitfalls in methods of evaluation. Johnson and Kusmierek (1987b) discuss self-report methods and note that "The limitations of self-report data have been noted by many researchers and careful attention should be paid to ensure that these limitations are not overlooked when interpreting evaluation data" (Johnson & Kusmierek, 1987b, p. 155). One of these limitations was discussed by Sprangers and Hoogstraten (1989) who found that response shift bias was a factor that needed to be considered when administering evaluation instruments which relied on self-report data prior to training. Response shift is a change in a participant's internal standard for determining his or her level of functioning on a given dimension. Response shift bias can be prevented by administering a behavioral pretest which gives the participant a more realistic standard for personal assessment and reduces the potential for response shift, thus allowing comparability between pre- and post-training self-report data. Johnson and Kusmierek (1987b) also warn evaluators to be sure they understand what it is that they are evaluating. They claim that "Many HR trainers confuse the results of implementation evaluations with instructional and job performance effects....It is gratuitous to assume a positive relationship between trainees' or trainers' level of satisfaction and instructional and job performance effects...In essence, HR trainers are hypothesizing a causal relationship between participation in a training program and instructional effects without adequately testing the relationship" (Johnson & Kusmierek, 1987b, pp. 155-156).

Summary

As can be seen from the review above, there are standardized instruments available for evaluation, but none has gained the unified support of evaluators. Because needs assessment is a key part of the design of any effective training program (Goldhaber, 1990; Goldstein, 1993; Johnson & Kusmierek, 1987a and 1987b), and because needs assessment will be combined with a review of organizational goals and current knowledge, skills and abilities (KSAs) before program implementation (Goldstein, 1993), it may be nearly impossible to develop standard methods of evaluation as called for by Stevens and Hellweg (1990). In fact, there are arguments for evaluation criteria being built in as the programs are being developed, which implies different criteria for each program, and there are also suggestions that customized surveys are the most appropriate methods for evaluation (McLean, 1988). The most important thing seems to be at present that evaluation be done at a level beyond the simple reaction sheets (level one) and the occasional pre- and post-test administered immediately after the class (level two). Until adoption of standard methods and instruments, it is important to use a method which will yield the data necessary for an effective evaluation. In addition, evaluation at other levels should attempt to establish a relation between the levels, such as learning causing behavior or behavior causing results. This suggests the following set of research questions.

Research Questions

RQ1: How does formal communication training in oral communication skills affect oral communication behaviors?

This question looks for changes in behavior reflecting transfer of the training or learning to the work environment or to another environment. This transfer will correspond to Kirkpatrick's third level of evaluation, behavior (Goldhaber, 1990; Goldstein, 1993).

RQ2: Do changes in oral communication behaviors yield positive results for individuals? This question looks for results of behavior changes potentially identified in RQ1 to see whether these results are positive for the individual. Since the results will not be evaluated for the organization, this question only partially addresses Kirkpatrick's fourth level of evaluation, results (Goldhaber, 1990; Goldstein, 1993).

Theoretical Perspective

A psychological perspective (Krone, Jablin, & Putnam, 1987) will be used to determine individual perceptions of the various results of the communication skills training. Self-report data of perceived changes in behavior due to the training, and self-report data of perceived benefit, if any, of changed behaviors will be gathered. Once the data from this study are analyzed, it should be possible to develop a more rigorous quantitative approach to assess behavioral changes and results throughout the organization.

Study Design and Methodology

For the past several years, a large medical organization in a medium-sized southwestern city, in partnership with the local university, has been providing training in basic communication skills to its front-line employees. The work has been done under a grant from the Department of Education specifically designed to bring training in workplace literacy and basic skills to front-line employees. The specific courses that have been taught include oral communication skills, written communication skills, reading and study skills for employees anticipating returning to school or attempting their GEDs, effective presentations, and communication for supervisors, designed for new or soon-to-be supervisors or team leaders.

While evaluation was a key part of the grant proposal for the project (Bernhardt & Meyer, 1991), only one attempt has been made to do more than evaluate immediately whether participants liked the course and whether they learned what they were supposed to learn (Ham & Acchione-Noel, 1991). There is a certain amount of anecdotal evidence concerning long-term results, but

there has been virtually no formal follow-up of behavioral changes and results. This organization provides an excellent setting for evaluating the effect of communication skills training over a long period of time.

Description of Organization Studied

As noted above, this is a large medical organization run by a Board of Directors, a President and Chief Executive Officer, and six administrative vice-presidents. Personnel at the organization range from highly skilled professionals with staff positions to support personnel with minimal education who are often minorities and women, many of them with English as a second language. The departments range from those that deal almost exclusively with customers and the public to those who provide support services and deal only with internal communications. The range of education levels and communication skills within the organization is extremely broad, and the requirement for dealing with a broad cross-section of the public adds an additional burden to the communication demands on all employees, especially front-line employees. The communication skills training program described above was developed to address the needs of these employees specifically.

Description of Participants and Sampling Method

Communication skills training has been presented in this organization since late 1990. The oral communication skills training course was selected for evaluation for this study because of the critical nature of oral communication in this organization, and attendance lists for that course were obtained from the Educational Services Department to serve as the basis for sample selection. A purposive sample of participants, consisting of all members of three departments who had completed the course and who were still employed by the organization, was chosen for interviews. The three departments were selected because a large percentage of each department had attended the course during a short time frame, and time frames for each department had been separated by large

periods of time, nine months to one year. This provided a basis for evaluating similar groups and for evaluating the training itself at three specific time points.

Participants from Department A completed the course during April-May 1992. All four participants who completed the course were interviewed, along with a supervisor who had not completed the course, but who had observed the participants before and after the training. Participants from Department B completed the course during April-June 1991. Seven of the nine participants who completed the course were still employed and were interviewed. Participants from Department C completed the course during October-December 1990. In this department, all members had completed the course in 1990 by management direction. Of the twenty-four original participants, eleven were still employed and were interviewed. This gave a total of twenty-two participants and one supervisor who were interviewed for this study.

Conceptual and Operational Definitions of Theoretical Concepts

Operational definitions for the concepts in the research questions are provided below.

- Communication training is defined as a process that provides for presentation, demonstration, and practice of communication skills or behaviors.
- Communication skills are defined as:
  - Active listening;
  - Paraphrasing to clarify or understand the situation;
  - Dealing with feelings or emotions, both personal and those of others;
  - Empathizing;
  - Being aware of the different communication styles among different people, such as task-oriented or people-oriented styles;
  - Body language and non-verbal communication; and
  - Discussing and controlling conversations.

(N. B. - The skills listed above overlap to some extent, such as active listening being an integral part of both empathizing and paraphrasing. They are listed this way because they

are taught this way in the oral communication skills course, with paraphrasing and empathizing building on active listening.)

- Changes in communication behaviors are defined as voluntary statements of perceived increased or decreased use of the communication skills above.
- Positive results are defined as voluntary statements of examples of perceived improvement in an individual's interaction with his or her environment. Improvement may come in the areas of communication satisfaction, reduced tension in the workplace, increased comfort or reduced anxiety or communication apprehension in oral communication, better job evaluations or recognition from peers or supervisors, or similar outcomes.

Note that both changes in communication behavior and positive results are defined using voluntary self-report data. Because no baseline data exists for the study, and because a psychological perspective places the locus of analysis in individual perception and conceptual filters (Krone, Jablin, & Putnam, 1987), this is deemed to be an appropriate method for this stage of evaluation.

Measures Used and Rationale

In order to gather self-report data from participants concerning changes in behavior and perceived benefits, a scripted interview form was developed. The scripted interview used by Ham and Acchione-Noel (1991) was used as an example of a proven technique for evaluating the written communication training in this organization. Questions were arranged in a funnel order, asking participants first to remember anything they could about the course and then asking for more detail as they provided more detailed information. If specific skills were recalled or described, additional questions were listed about a specific incident of using that skill or what the result had been. In no case were specific skills listed in the questions or asked about in the follow-up or probing questions in order to avoid leading or biasing the interviewees as much as possible. Finally, the

questions were reviewed by the training program project directors for any additional comments or suggestions.

Procedure

Supervisors in each of the departments were contacted and the project was explained to them, noting that it had the approval of the Chief Operating Officer and the Vice president of Human Resources. Supervisors' approval was obtained for interviewing their employees, and then individual employees were contacted and interview times were scheduled. Supervisors were very cooperative and allowed employees to be interviewed on work time. Interviews were conducted in various sites, including the cafeteria or empty offices or conference rooms, in order to ensure privacy away from the immediate work environment.

The purpose of the project was explained to each participant and they were asked for permission to audiotape the interview. All agreed to this and all interviews were audiotaped. Interviews took anywhere from 15 minutes to 45 minutes. The scripted interview was followed to the extent possible, although at times participants volunteered answers to questions out of order and these were followed up at that time. At no time did the interviewer mention any of the skills or potential benefits unless they had been explicitly mentioned by the participant first. Probing questions asked simply for elaboration or for an example of using a skill already mentioned.

Partial transcriptions were made of all tapes for ease of reference, and these were examined for explicit reference to any of the skills listed above, as well as for descriptions of use of skills without actually naming the skill. Repeated themes or reports of benefits of using the skills were marked for later analysis and grouping.

Results

General Findings

Of the twenty-three participants who were interviewed, all but one reported either observing or experiencing some changes in behavior and positive results attributed to the training.

Incidents mentioned by one participant were often confirmed by other participants, leading to confidence in the validity of the responses. Participants often could not name the skills that were taught in the course, but they then went on to describe the use of skills later in the interview. This was particularly apparent in Department C which had completed the course in late 1990. Seven participants volunteered the observation that they used the skills with children or with other family members, providing a broader definition of environment than simply the workplace. Finally, six participants volunteered the observation they used the skills automatically, without consciously thinking about them.

Specific Findings for Research Questions

Research Question 1 asked how communication training affected communication behaviors. The responses are shown in Table 1 as the number of participants who reported using a particular skill or communication behavior. Based on the results presented in Table 1, the answer to Research Question 1 is that participants report perceiving that communication training results in changes to oral communication behaviors, and these changes persist over a period of nine months to several years, at least for some participants.

Skills Reported as Used by Participants	Number Who Reported Using Skill (n=23)
Active listening	12
Paraphrasing to clarify or understand	5
Dealing with feelings and emotions	4
Empathizing	3
Communication styles	2
Non-verbal and body language	2
Discussing and controlling conversations	2

Table 1. Perceived Behavior Changes By Skill as Reported by Participants

Research Question 2 asked whether the changes in oral communication behaviors yielded positive results for the participants. The responses are shown in Table 2 as the number of participants who reported perceiving each result. Results are shown as repeated themes which appeared in the interviews. Based on the data shown in Table 2, the answer to Research Question

2 is that participants report perceiving that changes in communication behaviors attributed to communication training yield positive results for individuals.

Positive Results Reported by Participants as Repeated Themes from Interviews	Number Who Reported (n=23)
Better group communication and less tension	9
Improved family and personal communication	7
More teamwork and smoother work flow	5
Positive attitude change toward job, work area, coworkers	5
Reduced anxiety and less communication apprehension	3
Miscellaneous (Stress reduction, recognition from supervisor or peers, increased self-esteem)	6

Table 2. Perceived Positive Results Due to Changes in Communication Behaviors

Patterns and Contradictions Among Data Sources

The patterns observed in the interviews were remarkably consistent, with the exception of the single individual who reported no benefits from the program. This individual stated that when he was involved in working he was not "thinking about using skills from some communication class he had taken." This seemed to reflect a perception that he had to think about the skills to use them, and it contradicts the reports from at least six participants that they use the skills automatically.

Discussion

The results presented above support and extend the literature on communication training and evaluation in several ways. First, they support the results of several studies showing that participants perceive that communication training can change communication behaviors and that these changes in behavior can persist over time (Mattox & Smith, 1983; Papa & Graham, 1991). Second, in their reliance on self-report data using a psychological perspective, they confirm that participants will perceive changes in behavior based on the skills taught in class and report them consistently to researchers. This finding supports DeWine's (1987) use of self-report data on the Training Impact Questionnaire, a method which was questioned by Stevens and Hellweg (1990). Finally, it extends the current literature by providing one of the few studies which looks at both

behavior change (level three of Kirkpatrick's evaluation hierarchy) and results of those behavior changes (level four) in a single study. Results were found to be positive for the employees, who could report specific benefits from the use of the communication skills. Results for the organization were implied as they were by Bell and Kerr (1987), who assumed that more efficient use of time, better communication, and fewer errors would result in better productivity for employees who had been trained. Whether or not this implication is valid is a subject for future research.

The study also demonstrated the power of using personal interviews to gather evaluation data of this type. In fact, while it is possible to gather anecdotal data and personal success stories using other methods, personal interviews provide an excellent means for doing so. For example, one participant reported seeking out difficult customers to work with, and he reported great success in doing so. Another reported understanding himself and his response to stress better after the course. This led him to request a change in job assignment rotations so as to balance his work in stressful areas, and he reported being much happier since the change. Still a third reported increased self-esteem and confidence in communication which led her to apply for a different position. Her supervisor recognized her new skills and supported her application, and she was given the job. It may have been possible to obtain this data using open-ended questions on a general survey, but it is less likely, and personal interviews should continue to supplement other means of data gathering.

Several implications for communication training design and development also emerged from this study. First, there was a confirmation of the importance of role-playing (Hudson, Doyle, & Venezia, 1991) during the training, and second, confirmation of the importance of practice and feedback (Kurtz, 1982; Rybczyk, 1987) when learning new skills and transferring them to a new environment. Role-playing was a significant part of the course structure for the oral communication course, and it was one of the features of the course that was mentioned by many participants as being very helpful, along with the importance of the role plays using real-life

situations to improve relevance to the transfer environment. This suggests that role-playing should continue to be a major part of communication training.

The importance of practice and feedback emerged in comments by participants in the two larger departments. Participants reported using the skills with each other during and after the class in what might be called a manner of joking self-awareness. They would recognize when one or another was trying to use or practice a skill and would comment on it. As skills began to be used more naturally, this self-awareness diminished, but it was very important as a source of reinforcement using practice and feedback immediately following the class. The participants in the smallest department did not report this awareness and practice, and at least one participant thought that the course would have been more effective if more people from the department had taken it. This suggests two implications for training design and delivery. First, to the extent possible, large or intact groups should be trained or encouraged to participate concurrently. This will facilitate the use of the practice and feedback which was so important to changing the communication behaviors of participants. Second, if possible, follow-up sessions should be scheduled for participants several months after the initial training. This was suggested by several participants and would provide for intensive practice and feedback after a period of using the skills and incorporating them into a repertoire. It could also provide an opportunity to use actual situations in role plays, and could provide an excellent setting for evaluation of behavior changes by trainers.

Another important finding was confirmation of the importance of the classroom or workshop experience itself as reported by Elmes and Costello (1992). One of the reasons for Department C attending the class as a group was a perception by management that communication had broken down in that department and that it was affecting work. Many participants reported that one of the primary benefits of the class was simply having a safe place to discuss problems and to work out communication problems with coworkers and supervisors without fear of retribution. In this case, the trainers acted as facilitators to allow the problems to surface and be discussed. As Elmes and Costello (1992) note, "Effective communication skills training begins when people are encouraged and given the opportunity to relate to one another in meaningful ways.

It begins when people have a chance to explore and ask questions about relationships and their contextual influences" (p. 443). Several participants commented that it would be good to do that again and to incorporate the new people in the department, a suggestion that may be worth pursuing.

Finally, this study demonstrated that it is possible to gather meaningful evaluation data without the use of surveys and quantitative methods. While the results cannot be quantified into bottom-line figures for the organization, they do provide an indication that participants consider the training beneficial and useful in many ways. The results have good internal validity in that they were collected across three departments having very different responsibilities, and given the uniformity of results, one could anticipate good intra-organization validity. External validity beyond this organization is problematical, although it is possible that the results may be generalizable to similar organizations using the same program and trainers. This will be confirmed during continuation of this study in several of those organizations using the training in the future.

Strengths and Limitations of Current Study

Some of the strengths and limitations of the current study have been addressed above. Confirmation and extension of the current literature is obviously one of the strengths, as is the demonstration of connecting evaluation levels three and four in a single study. The implications drawn for training design and delivery should provide important benefit for trainers and training designers. Finally, confirmation that communication training evaluation is possible through the use of personal interviews should help to convince management of the benefits of continuing to perform such evaluations.

Obvious limitations are the lack of generalizable methods for evaluation as called for by Stevens and Hellweg (1990) and the lack of development of baseline data called for by Corder (1988). The external validity or generalizability of the results may be a limitation, but this will be explored in future research in this organization and others using the same training program. Finally, the study limited itself to self-report data from participants only, with the exception of one

supervisor, and it could benefit from triangulation of observations by coworkers and other supervisors. While there was some confirmation of data by cross-report by participants, it was limited and informal. This should be remedied in the continuing studies planned in the future.

Conclusions

This study found that, in this organization, participants in formal communication training perceive behavioral changes which they attribute to the training, and these behavioral changes persist over time. Further, these participants report positive results from the use of the changed behaviors, thus establishing a perceived positive effect due to the communication training program. This suggests that the decision to use communication training in this organization was worthwhile, especially for those employees who participated. Given the uniformity of responses across the three departments examined, one could expect good intra-organizational validity for this training, meaning that a decision to continue the training could be expected to produce similar favorable results in other departments. Given that similar organizations exist in other cities, it is possible that the training results may generalize to these other organizations, but this study did not address that issue.

The study also demonstrated that it is possible to perform useful evaluations of levels other than reaction and learning even in the absence of baseline performance data and without using extensive quantitative methods. In fact, the psychological perspective and the personal interviews yielded results which might not have been obtainable with a general survey. The implications for training design and delivery would not have appeared with a survey which simply examined outcome variables, lending credence to Goldstein's (1993) observation concerning the potential error of not including process variables in evaluation. It is also unlikely that the rich supply of anecdotal evidence would have appeared using a general survey.

While the results do not provide the standardization called for by Stevens and Hellweg (1990), they do provide evidence of the value of evaluating communication training programs at the behavior and results levels. This is a valuable addition to the current literature, which contains

few published reports of evaluations combining these levels. Continued research along these lines should continue to provide valuable data for researchers in organizational communication, who must address these issues to stay abreast of current trends in rapidly changing organizations.

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